

Goal: ENVIRONMENTAL PROTECTION AND ENHANCEMENT

Desired Community Condition(s)

Residents participate in caring for the environment and conserving natural resources.

Air, land and water systems protect health and safety.

Program Strategy:VEHICLE POLLUTION MANAGEMENT

56509

To protect public health by minimizing harmful vehicle pollutant emissions through the design and operation of cost-effective prevention and control programs.

Department: ENVIRONMENTAL HEALTH

Service Activities

Vehicle Pollution Management

Strategy Purpose and Description

To protect the public health and air quality by minimizing harmful vehicle emissions through the design and operation of cost-effective prevention and control programs.

This is achieved by optimizing fuel combustion efficiency in motor vehicles thereby increasing fuel economy and reducing harmful pollutant emissions.

The customers are citizens, motorists, and AirCare inspectors. Currently, Albuquerque is in attainment of the National Ambient Air Quality Standards and motorists can obtain a no-appointment needed emission test at over 130 AirCare Stations for an average cost of \$20 and as little as \$10.

Changes and Key Initiatives

New car exemptions from testing were extended to 2 registration cycles or up to 4 years to enhance customer convenience and program credibility.

Input Measure (\$000's)

2001	242	242 AIR QUALITY FUND	1,172
2002	242	242 AIR QUALITY FUND	1,172
2003	242	242 AIR QUALITY FUND	990
2004	242	242 AIR QUALITY FUND	1,016
2005	242	242 AIR QUALITY FUND	1,128
2006	242	242 AIR QUALITY FUND	1,423

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Reduce vehicle emissions as a result of identifying and repairing gross polluting vehicles.	PASSING TESTS- Vehicles that pass their biennial emission test	2001	220,000		220,000	
		2002	210,000pas		209,737 passed	
	PASSING TESTS- Vehicles tht pass their biennial emission test	2003	222,000 pass		216,248	

<i>PASSING TESTS- Vehicles that pass their biennial emission test</i>	2004	210,000 pass			217,295 pass	<i>half of subject fleet tested per year</i>
	2005	210,000 pass	tbd		tbd	<i>data from new BAR97 analyzers is incompatible with existing VPM database. VPMD is working with vendor on new vehicle information database (VID)</i>
	2006	210,000 pass				

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Reduce vehicle emissions as a result of identifying and repairing gross polluting vehicles	<i>FAIL/INVALID TESTS- Vehicles that fail their emission test or are in such disrepair that test can not be completed.</i>	2001	0,0		16,368fail, 9600 invalid	
		2002	16,000fail, 9,000 invalid		13,125 fail, 8,304 invali	
	<i>FAIL/INVALID TESTS- Vehicles that fail their emission test or are in such disrepair that test can not be completed.</i>	2003	22,550		22,245	
	<i>FAIL/INVALID TESTS- Vehicles that fail their emission test or are in such disrepair that test can not be copleted</i>	2004	22,500		20,333	<i>Vehicle cannot be registered without pass test or time extension for repair</i>
		2005	22,500	tbd	tbd	<i>data from new BAR97 analyzers is incompatible with existing VPM database. VPMD is working with vendor on new vehicle information database (VID)</i>
		2006	22,500			

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Reduce vehicle emissions as a result of identifying and repairing gross polluting vehicles	RETEST PASS- Vehicles that fail an emission test are repaired and then retested.	2001	0		9,904	Retest Pass
		2002	9,500		9,019	9,500 Retest Pass
	RETEST PASS- Vehicles that fail an emission test are repaired and then retested.	2003	8,300		8,220	
	RETEST PASS- Vehicles that fail an emission test are repaired and retested	2004	8,500		5,827	On average, repaired vehicles realized an 83% reduction in hydrocarbons
		2005	8,500	tbd	tbd	data from new BAR97 analyzers is incompatible with existing VPM database. VPMD is working with vendor on new vehicle information database (VID)
		2006	8,500			

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Maintain National Ambient Air Quality Standards by reducing vehicle emissions via the Vehicle Inspection & Maintenance and the Oxygenated Fuels programs.	TONS OF CO PER DAY WITH/WITHOUT VEHICLE POLLUTION MANAGEMENT PROGRAM	2001	0,0		206 with/319 without	
		2002	202 with/315 without		202 with/315 without	
	TONS OF CO PER DAY WITH/WITHOUT VEHICLE POLLUTION MANAGEMENT PROGRAM	2003	207 with/310 w/o		207with 310 w/o	

Motor vehicles are the principal source of air pollutants in the Middle Rio Grande Valley Airshed

TONS OF CO PER DAY WITH/WITHOUT VEHICLE POLLUTION MANAGEMENT PROGRAM

2004	207 with/310 w/o		207 with / 310 w/o	CO tons per day derived from required EPA models which consider fleet mix, vehicle miles of travel, average speeds by roadway type, oxyfuel programs and test and repair program type
2005	207 with/310 w/o	tbd	tbd	requires EPA modeling runs, EPA model has changed to Mobile 6.2, program has changed to focus on ozone precursors. VPMD will work with AQD to obtain info from inventory or modeling.
2006	207 with/310 w/o			

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Reduce local consumption of gasoline	<i>GALLONS PER DAY DISPLACED Properly maintained and/or repaired vehicles get better gas mileage and the oxygenated fuels program displaces gasoline with domestically produced ethanol</i>	2001	see notes			FY/02: 90,000 of 1,058,000 FY/01: 85,000 of 1,004,000
		2002	in notes			8.5% for 4 months 90,000 of 1,058,000
		2003	8% for 4 m		8% for 4mo	90,000 of 1,058,000 gallons per day
		2004	8% for 4 m		8% for 4 mo	90,000 of 1,058,000 gallons per day
		2005	8% for 4 m	7.5% for 2m	9% for 4 m (projected)	based on measured ethanol content, oxyfuel coordinator left prior to completion of season, numbers will be finalized when position is filled
		2006	8% for 4 m			

Goal: ENVIRONMENTAL PROTECTION AND ENHANCEMENT**Parent Program Strategy: VEHICLE POLLUTION MANAGEMENT****Department: ENVIRONMENTAL HEALTH****Service Activity: Vehicle Pollution Management****5609000****Service Activity Purpose and Description**

The Vehicle Inspection and Maintenance program provides quality assurance oversight of a decentralized (private contractors) emission-testing network to ensure convenient, affordable testing service while preventing consumer fraud. Program staff provides training, technical assistance, and regulation of private AirCare inspectors, stations, and equipment. Program staff also oversees the winter Oxygenated Fuels program ensuring that only cleaner burning oxygenated fuel is used during winter months when vehicle cold-starts result in excessive carbon monoxide and hydrocarbon emissions. Primary customers are the citizens of Bernalillo County, vehicle owners, and AirCare inspectors and station owners. Currently, the public health based National Ambient Air Quality Standards are being maintained.

To ensure compliance with this program, the department conducts three different types of audits of air care stations on a quarterly basis. Therefore, each air care station is audited at least once per month.

Changes and Key Initiatives

Implement vehicle information database (VID) to facilitate quality assurance, technical assistance and customer service aspects of existing BAR97 emission testing equipment.

Design and implement loaded mode diesel testing capability at the referee/retest center to provide for meaningful diesel testing results for diesel emission tests required at change of ownership.

Input Measure (\$000's)

2002	242	242 AIR QUALITY FUND	1,172
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Strategic Accomplishments

FY/05: Fully implemented use of new 4-gas emissions analyzer with OBDII and gas cap test capability

FY/06 (projected): Implement use of vehicle information database to augment 4-gas analyzer to provide for electronic data transfer between Air Care stations and VPMD.

Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of Covert Audits compared to # of AirCare stations	2001			150/136	
# of Covert Audits compared to # of AirCare stations	2002	150/134		160/133	
# of Covert Audits compared to # of AirCare stations	2003	150/130		190/131	
	2004	150/130		33/115	
	2005	150/130	28 / 122	tbd / 122	not all covert audits entered into database yet due to unexpected departure of quality assurance supervisor
	2006	125 / 125			

Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of Field Audits compared to # of AirCare stations	2001			1632/136	1,608 / 134
# of Field Audits compared to # of AirCare stations	2002	1,608/134		2,913/133	1,608 / 134
# of Field Audits compared to # of AirCare stations	2003	2,780/130		2,687/131	
	2004	1,560 / 130		1,803 / 115	
	2005	1,560 / 130	732 / 122	1586 /122	
	2006	1,500 / 125			

Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of Oxyfuel Samples compared to total # of tanks	2001			738/765	
# of Oxyfuel Samples compared to total # of tanks	2002	765/765		732/760	
# of Oxyfuel Samples compared to total # of tanks	2003	760/760		868/763	
	2004	760/760		451/758	
	2005	760/760	40 / 760	220 / 760	
	2006	200/760			

Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of Remote Sensing Unit Tests	2001			25,000	
# of Remote Sensing Unit Tests	2002	30,000		43,000	
# of Remote Sensing Unit Tests	2003	36,000		13,200	
	2004	36,000		0	Equipment returned to manufacturer, unable to repair or calibrate
	2005	36,000	0	0	equipment calibration
	2006	3600			

Output Measures	Year	Projected	Mid-Year	Actual	Notes
Public visits to referee center for free retest following repair, time extension for major repair or diesel testing	2001			7,788	
Public visits to referee center for free retest following repair, time extension for major repair or diesel testing	2002	7,920		6,718	
Public visits to referee center for free retest following repair, time extension for major repair or diesel testing	2003	7,280		6,623	
	2004	7,500		6,989	

2005	7,500	4,600	8842
2006	8,500		